



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,680	11/20/2000	Timo E. Sivula		8410

7590

11/26/2003

Perman & Green  
425 Post Road  
Fairfield, CT 06430-6232

EXAMINER

D AGOSTA, STEPHEN M

ART UNIT

PAPER NUMBER

2683

7

DATE MAILED: 11/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

## Office Action Summary

Application No.

09/716,680

Applicant(s)

SIVULA, TIMO E.

Examiner

Stephen M. D'Agosta

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 11-14-03 have been fully considered but they are not persuasive:

1. The re-write of the abstract overcomes the objection from the first office action.

2. The USC 112 second paragraph rejection for claims 1 and 6 have been overcome by amendment to claim 1 and cancellation of claim 6.

3. The applicant argues that Miller fails to disclose prepayment of services that informs the user of an availability of different services. The examiner disagrees – Miller (page 2, L1-4) teaches buying “prepaid national **services**” for a cellular phone user. The Kiosk (figure 1) allows a user to view service(s) available and pay for them (ie. different denominations of prepaid services for, roaming, non-roaming, local, long distance, etc). While Miller teaches a vending system, it's ultimate function is to allow a user to select/purchase service(s). There is a direct correlation between buying a service and it's cost. If the user buys \$10 of local service, then they will not be able to call long distance. Hence, the examiner interprets Miller's disclose of buying “prepaid national services” as allowing the user to select (from a list) exactly what service(s) they want/need and how much it will cost them. Further to this point is Miller's teaching (page 25, L10-23) whereby the invention can be used for “a wide range of other pre-paid services) which would require selection of services as well. Lastly, claim 3 teaches buying service from a service provider - one skilled in the art would provide multiple services that can be purchased to increase revenue.

4. The applicant argues that Miller does not disclose a receiving an authentication key and verifying validity of key. The examiner disagrees. Miller teaches use of a bank card/credit card which reads on an “authentication key” (Claim 7, page 30-31). Miller also points out use of a PIN (page 3, 2<sup>nd</sup> paragraph) which reads on an authentication key as well.

5. The applicant argues Miller/Geiger do not disclose scanning a database to detect lapsed authentication keys. The examiner disagrees. Geiger teaches use of authentication keys and a time period that they are valid for – which infers scanning a database of the keys and time periods for expiration. One skilled in the art can easily have commercial database software check a key vs. valid/invalid.

6. The applicant argues that Miller/Comer do not disclose testing and final verification. The examiner disagrees. Comer teaches a roaming user provided an opportunity to use/test a service and acceptance/rejection of the service which reads on the claim.

7. Since the applicant has amended the claims to be broader, the previous rejection still stands.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

**Claims 1, 3, 9-10, 12 and 14-15** rejected under 35 U.S.C. 102(e) as being anticipated by Miller et al. WO98/47112 (hereafter Miller).

As per **claims 1 and 14-15**, Miller teaches a method for prepayment of a service (abstract), comprising:

Informing the user of the availability of a plurality of different services (figure 1 shows Network device/Kiosk where the user can view what service(s) are offered for purchase, such as air time)

Receiving from the user over a first communications link an indication of a desired service and a request for the desired service (abstract teaches electronic means between purchaser and others for pre-payment AND figure 1, Network device/Kiosk where user requests service)

~~Receiving from the user an authentication key to indicate prepayment for the requested service~~ receiving from the user an authentication key to indicate prepayment for the requested service and verifying the validity of the authentication key (Claim 7,

page 30-31 teaches the use of a bank card or pre-registered bank account which reads on authentication).

~~Verifying whether the authentication key is valid~~ (Claim 7, page 30-31 teaches the use of a bank card or pre-registered bank account which reads on authentication).

~~Providing the requested service if the key is valid~~ (figure 5 shows the user can perform the prepayment using their cell phone, page 27, L6-8) which would then allow the user to connect to the cellular network and use the requested service AND providing the requested service to the user over a second link (claim 11, page 32 teaches the use of multiple communication links).

***With further regard to claim 15***, Miller teaches multiple computers/databases being involved in the system and computer readable program means for receiving from the user an authentication key to indicate prepayment for the requested service, computer readable program means for verifying the validity of the authentication key (figure 1 shows phone company system, bank system, database #5, switch) which all comprise computers/databases and software programs to perform the necessary steps for the invention's operation.

As per **claim 3**, Miller teaches claim 1 wherein an authentication key is required each time a service is provided (Claim 7, page 30-31 teaches the use of a bank card or pre-registered bank account which reads on authentication each time service is provided).

As per **claim 9**, Miller teaches claim 1 wherein the authentication key is a printed user readable code (Claim 7, page 30-31 teaches the use of a bank card which contains a user readable account number/code and reads on the claim).

As per **claim 10**, Miller teaches claim 1 **but is silent on** concealing the authentication key with a non-reversibly removable concealing means.

The examiner takes Official Notice that Scratch-off, non-reversibly removable concealing means are known (eg. lottery tickets) to prevent theft.

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that the authentication key is concealed with non-reversibly

removable means, to prevent the inadvertent stealing of the key without the user knowing it had been compromised/stolen.

As per **claim 12**, Miller teaches claim 1 wherein the first communications link is based on at least one of the following: data network, phone network, mobile network, LAN and WAN (claim 11, page 32 teaches the use of multiple communication links).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 2** rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Mueller et al. US 6,222,915 (hereafter Mueller).

As per **claim 2**, Miller teaches claim 1 but is silent on wherein the step of informing the user of the availability of a plurality of different services informs the user of the availability of a plurality of different contents, and correspondingly, the step of providing the requested service provides the requested content.

Mueller teaches a method for providing telecommunication-based services (title) whereby the user interacts with a database to input service request(s) [figure 1, #102-106]. Mueller teaches the aim is to successively offer the customer all the service components which the user needs to fulfill his/her service request (C1, L66-67 to C2, L1-6) which would require basic information about each service to be provided to the user (which reads on the claim).

Art Unit: 2683

**Claims 4 and 7** rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Geiger et al. US 6,377,810 (hereafter Geiger).

As per claim 4, Miller teaches claim 1 **but is silent on:**

Arranging each of the authentication keys to indicate a time period during which they are valid

Verifying validity of authentication keys by comparing present date with time period the key is valid

Rejecting expired keys.

Geiger teaches a wireless system that uses encryption keys for digital signatures which are checked for validity (ie. current or expired) [abstract, figure 2, #56 and #58, C2, L45-50 and C3, L18-30).

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that encryption keys are checked for validity over a time period, to provide security means by ensuring that a key is only valid for a small time period to make it more difficult to steal a key.

As per **claim 7**, Miller teaches claim 4 **but is silent on:**

Scanning a database of authentication keys for detecting/removing lapsed authentication keys from said database.

Geiger teaches use of authentication keys and a time period that they are valid (or have lapsed). One skilled in the art would provide for tracking (eg. via a database) of the keys for validity/expiration. Hence, two tables would be tracked, valid and expired. This would also provide means for detecting an intruder trying to use the expired key of someone else.

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that a database stores valid/expired keys, to provide means for tracking keys and removing those that are expired.

Art Unit: 2683

**Claims 5 and 8** rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Lesley US 6,188,752 (hereafter Lesley).

As per **claim 5**, Miller teaches claim 1 **but is silent on** wherein the method further comprises the following before receiving the request from the user:

Generating the authentication key

Maintaining an authentication key validity database for verifying the validity of any of the generated authentication keys and

Delivering the authentication key to a user.

Previously, the examiner used the concept of a credit card/bank account as an authentication key. Miller is silent on the card/account number being dynamic such that another entity generates it. Lesley teaches providing prepaid telecommunication services (title) whereby the user is assigned a record (eg. authentication key) and associated monetary value which are provided to the user and analyzed by the network to allow/deny a call (abstract and figure 4a, #85 and #87).

As per **claim 8**, Miller teaches claim 5 wherein a user pre-pays for service via a bank card (which is authenticated and debited) and whereby the pre-paid services account is reduced based on usage as is known in the art (abstract and Summary of Invention) which reads on the claim limitation.

**Claim 11** rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Carlsson et al. US 6,490,367 (hereafter Carlsson).

As per **claim 11**, Miller teaches claim 9 but is silent on printing a group of authentication keys on a card.

Carlsson teaches a card for that contains the identity and, if appropriate, certificates and signing and authentication keys (C5, L55-60).

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that one can print a group of authentication keys on a card, to provide means for the user to have multiple, time-sensitive keys on one card so that security is increased (since one key isn't used for too long) and for ease of use since only one card is carried/used.



**Claim 13** rejected under 35 U.S.C. 103(a) as being unpatentable over Miller and further in view of Comer US 5,610,973 (hereafter Comer).

As per **claim 13**, Miller teaches claim 1 **but is silent on** the method comprises:

Allowing a user to test a service requested and

Receiving final verification form the user before the user is provided the service.

Comer teaches a (roaming) cellular user that is provided the opportunity of using selected services while roaming in a different service provider's area and acceptance/rejection of the service by the user (abstract).

It would have been obvious to one skilled in the art at the time of the invention to modify Miller, such that additional services can be tested by the user, to provide means for the user to purchase new services after a trial period to see if they like said service.

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


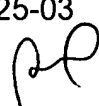
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist on 703-306-0377.

SMD  
11-25-03



WILLIAM TROST  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600